

DRAFT

Bay-Delta Standards Contained in D-1641

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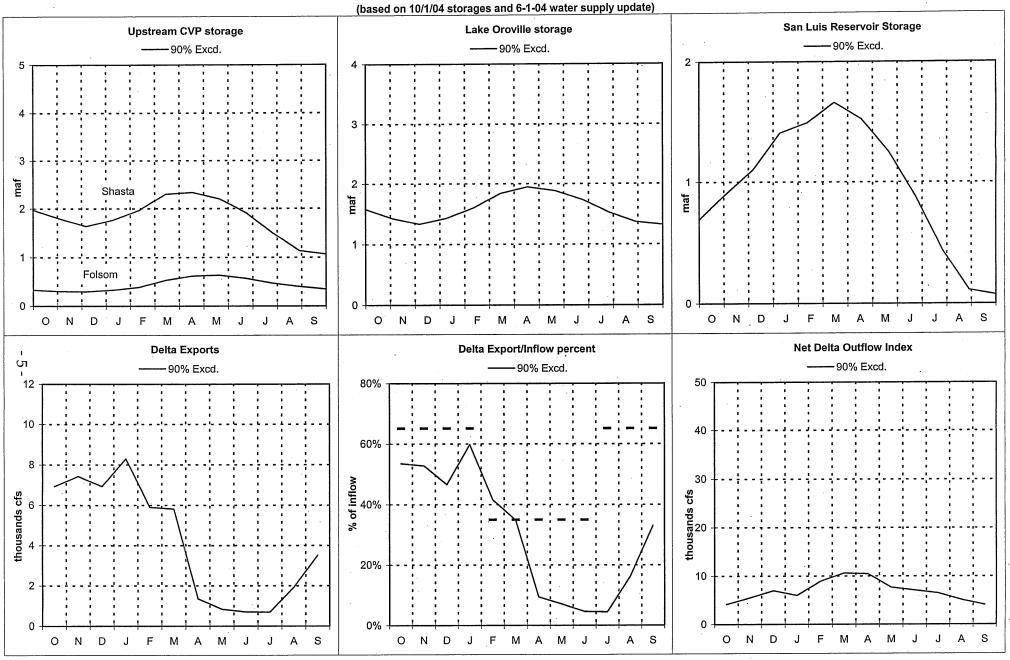
CRITERIA	Nov 04	Dec 04	Jan 05
FLOW/OPERATIONAL			
Fish and Wildlife			
SWP/CVP Export Limits			
Export/Inflow Ratio		65%	
Minimum Outflow - mon.	4500 cfs	4500 cfs	4500 cfs
- 7 day avg.	3500 cfs	3500 cfs	3500 cfs
Striped Bass Survival			
Suisun Marsh			
Habitat Protection Outflow, X2			
River Flows:			
@ Rio Vista - min. mon. avg.	4500 cfs	4500 cfs	
- 7 day average	3500 cfs	3500 cfs	
@ Vernalis: Base -min. mon. avg.			
- 7 day average			
Pulse			
Delta Cross Channel Gates	Conditional: For the	Nov-Jan period, DCC gates may be closed for u	p to a total of 45 days
WATER QUALITY STANDARDS			
Municipal and Industrial			
All Export Locations		<= 250 mg/l Cl	
Contra Costa Canal		<= 150 mg/l for 175 days (days have been met)	
Agriculture			
Southern Delta		30-day running average EC <= 1.0 mS	
Fish and Wildlife			
Suisun Marsh Salinity	15.5 mS/cm for Eastern / 16.5 for Western Mars	15.5 mS/cm	12.5 mS/cm

Water Year Classification: (May 1 forecast)

SRI (40-30-30 @ 50%) = 7.70 (Below Normal)

SJV (60-20-20 @75%) =2.2 (Dry)

SWP & CVP WY 2005 Forecasted Operations.



Flows are monthly averages.

WY 2003/2004 EWA Accounting Summary

Based upon October Operations Study - 90% Exceedance Hydrology

Assumptions: SWP Allocation - 65%; NOD Purchases - 120 TAF; SOD Purchases - 35 TAF

			E,	WA NOD a	and SOD 5	Storage ((+	= Acquis	itions) ar	d (- = Rele	ases))							
1	C/O	Oct	Nov	Dec	Jan	Feb ``	Mar	Apr	`May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
NOD (Oroville) ⁰	0.398					-0.398 ³											0
NOD (YCWA/PCWA)									102 ⁴	20 ⁵							122
YCWA ²											-41	-43	-17	-0.9			-102
Losses/Gains 12												-14	-16				-29
PCWA (released into Folsom)		1											-7.9	-4.7	-7.4		-20
SOD (KCWA/SCVWD)		1							35 ⁶	-12 ⁶	-12 ⁶	-12 ⁶					0
SOD (MWD)		1															0

					EWA Ass	et Acquis	ition in S\	VP San L	uis ¹								
2	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I Relaxation																	0
EWA share of SWP gain			0.19			0.20											0.40
Project Pumping to reduce EWA debt																	0
JPOD using excess flows																	0
JPOD using NOD storage																	0
Xfer NOD - Sacramento River ²											14 ⁴	6 ⁴	1.1	0.9 4			22
Xfer NOD - San Joaquin River 2																	0
SOD SWP Surface/GW Purchases										12 ⁶	12 ⁶	12 ⁶					35
Exchange of EWA assets																-9 ¹¹	-9
Groundwater pumping SOD																	0
Exchange from CVP to SWP in SL																	0
Total Monthly EWA Assets		0	0	0	0	0	0	0	0	12	26	17	1	1	0	-9	48

					EWA Ass	set Acquis	ition in C	VP San L	uis ¹								
3	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I Relaxation																	0
Project Pumping to reduce EWA debt							0.202										0
JPOD using excess flows																	0
JPOD using NOD storage											27 4	24 4			13.4 ⁵	4.6 ⁵	69
Xfer NOD - Sacramento River ²																	0
Xfer NOD - San Joaquin River ²																	0
SOD CVP Surface/GW purchases																	0
Exchange of EWA assets																	0
Groundwater pumping																	0
Exchange from SWP to CVP in SL																	0
Total Monthly EWA Assets	0	0	0	0	0	0	0	0	0	0	27	24	0	0	13	5	69

					EWA Ex	penditure	s at the Ex	port Pun	ıps								
4	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP export cuts							-0.45 ¹⁰	-6 ⁷	-52 ⁷								-58
CVP export cuts								-7 ⁸	-59 ⁸								-66
Total Expenditures	0	0	0	0	0	0	0	-13	-111	0	0	0	0	0	0	0	-124

				EW	A End-of-	Month Inc	remental	Storage (Changes								
5	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)	0.057	0.000	0.193	0.000	0.000	0.203	-0.453	-6	-52	12	26	17	1	1	0	-9	-10
CVP in SL	-0.202	0.000	0.000	0.000	0.000	0.000	0.202	-7	-59	0	27	24	0	0	13	5	3
NOD Storage	0.398	0	0	0	0	-0.398	0	0	102	20	-41	-43	-24	-6	-7	0	0
SOD Storage (non-S.L.)	0.000	0	0	0	0	0	0	0	35	-12	-12	-12	0	0	0	0	0
Total Incremental Storage Changes	0.253	0	0	0	0	0	0	-13	26	20	0	-14	-23	-5	6	-4	-7

				EWA	End-of-M	onth Stor	age Balan	ce at Var	ious Sites								
6	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
SWP in SL (without Source Shift)	0.057	0.057	0.250	0.250	0.250	0.453	0.000	-6	-58	-46	-20	-3	-2	-1	-1	-10	
CVP in SL (without Source Shift)	-0.202	-0.202	-0.202	-0.202	-0.202	-0.202	0.000	-7	-66	-66	-39	-15	-15	-15	-2	3	
NOD Storage	0.398	0.398	0.398	0.398	0.398	0.000	0	0	102	122	81	37	13	7	0	0	
SOD Storage (non-S.L.)	0.000	0	0	0	0	0	0	0	35	23	12	0	0	0	0	0	
EWA Asset Balance	0.253	0	0	0	0	0	0	-13	13	33	33	19	-4	-9	-3	-7	

					San Lui	s Reservo	ir Storage	Condition	ons							
7	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total Storage (base case) 9		962	1122	1316	1664	1878	2020	1781	1337	832	552	516	687	804	900	1102
SWP		608	613	616	809	971	1067	944	732	481	390	412	516	523	480	492
CVP		355	509	701	856	907	953	837	606	351	162	105	172	281	420	610
Encroachment																
Total Storage (EWA case)		962	1123 0	1317	1664	1878	2020	1768	1214	720	493	498	670	788	897	1095
MWD Source Shifting																
Storage (with MWD source shifting)		962	1123	1317	1664	1878	2020	1768	1214	720	493	498	670	788	897	1095

⁰ 2004 NOD Purchases = 100(YCWA) + 20(PCWA).

Carriage water loss in WY 2004 (between July and September) was 0%.

For the Fall 2004 transfers (between October and December), a carriage water loss of 10% is assumed until modeling results indicate otherwise.

¹ Aqueduct conveyance and evaporation losses are not included.

² Carriage water loss applies to water transfers from the Sacramento River (assumed to be 20% until modeling results indicate otherwise);

a 10% conveyance loss applies to water transfers from the San Joaquin River.

The SWP spilled ~ 400 af of EWA water stored in Oroville during flood control operations.
 2004 PCWA Transfer (Joint place of use) - may move first of November (250 cfs/day).

 ⁴ 2004 YCWA Transfer (Joint place of use)
 ⁶ 2004 SOD Transfers - 35 TAF from KCWA (SWP place of use)

The SWP costs for VAMP and post-VAMP shoulder are about 2.6 TAF, (for 4/15-4/3) = -5.7 TAF; 5/1-5/15 = +3.0 TAF) (cumulatively) and 55 TAF, respectively.

⁸ The CVP costs for VAMP and post-VAMP shoulder are about 17 TAF and 49 TAF, respectively.

⁹ Based upon DWR's 90% (90% Fall) allocation study (dated 10/2004).

 $^{^{10}}$ Conversion from EWA to Project water since San Luis Reservoir was physically full on March 30, 2004.

¹¹ A pilot Wet/Dry Exchange Program between EWA and MWD is being negotiated.

¹² YCWA released additional water for the EWA (1.7 TAF)

August: Due to water level problems in the Delta, EWA water could not be exported (9 days) (12.8 TAF)